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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,122	12/03/2003	Shane Taghavi	2504-017	4763

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EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,122

Applicant(s)

TAGHAVI, SHANE

Examiner

Andrew T. Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 5-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/3/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4 and 7-16, drawn to a polyolefin woven fabric and/or extrusion coating, classified in class 442, subclass 102.
 - II. Claims 5-6, drawn to a method of forming a coated polyolefin fabric, classified in class 427, subclass 413.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group II and Group I are related as process of making and product made.

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process. The product can be made by applying the coating by lamination or solvent coating rather than the claimed extrusion coating.

3. If the applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined. Therefore, upon the election of Group I, rejoinder will be considered upon indication of allowable subject matter pursuant to MPEP 821.04.

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4. During a telephone conversation with John Abokhair on 4/26/2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-4 and 7-16. Affirmation of this election must be made by applicant in replying to this Office action. Claims 5-6 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

5. The disclosure is objected to because of the following informality: The use of a number of trademarks has been noted in this application. A trademark should be capitalized wherever it appears and be accompanied by the generic terminology. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-4 and 7-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A “superior soft tactile characteristic” is claimed, but it is not clear which article(s) the currently claimed coating is being compared to when claiming the superior results and it is not clear how the product is superior.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,986,000 to Williams et al. (hereinafter referred to as Williams) in view of USPN 6,432,542 to Tsai.

Regarding claims 1-4, Williams discloses a polyolefin coating comprising about 25 to about 75% by weight polyolefin and about 25 to about 75% by weight thermoplastic vulcanizate (see entire document including column 3, lines 46-49 and column 4, lines 2-19). Williams is silent with regards to the hardness of the thermoplastic vulcanizate or the melt index of the polyolefin, therefore, it would have been necessary and thus obvious to look to the prior art for conventional materials. Tsai provides this conventional teaching showing that it is known in the polyolefin and thermoplastic vulcanizate coating art (see entire document including column 2, line 61 through column 3, line 27) to use a thermoplastic vulcanizate with a Shore A hardness grade of between 54 and 80 and/or a polyolefin elastomer with a melt index of less than or equal to 5.0 (column 2, lines 15-67 and Example 1). Therefore, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a thermoplastic vulcanizate with a Shore A hardness of between 54 and 80 and a polyolefin elastomer with a melt index of less than or equal to 5, motivated by the expectation of successfully practicing the invention of Williams.

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Regarding claims 3-4, Williams discloses that the coating may comprise a plastomer in an amount of 5 to 15% (column 4, line 59 through column 5, line 10).

10. Claims 1-4 and 7-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,833,333 to Reisdorf et al. (hereinafter referred to as Reisdorf) in view of USPN 5,986,000 to Williams in view of USPN 6,432,542 to Tsai.

Regarding claims 1-4 and 7-16, Reisdorf discloses a coated polyolefin fabric comprising an inner polyolefin fabric of multi-filament polyolefin yarn and one or more upper and/or lower “second polymer composition” coating layers (see entire document including column 1, lines 37-43, column 4, lines 12-14 and column 4, lines 37-44 and lines 58-62). Reisdorf discloses that the “second polymer composition” coating layers provide the laminate with the tear resistance, flexibility, strength and durability required for the end use of interest (column 1, lines 27-30 and column 5, lines 43-45) and that the coating layers may comprise a polyolefin or a thermoplastic vulcanizate (column 5, line 53 through column 6, line 7), but Reisdorf does not specifically mention a coating comprising both a polyolefin and a thermoplastic vulcanizate.

Williams discloses a polyolefin composition comprising about 25 to about 75% by weight polyolefin, about 25 to about 75% by weight thermoplastic vulcanizate, and a plastomer in an amount of 5 to 15% (see entire document including column 3, lines 46-49, column 4, lines 2-19 and column 4, line 59 through column 5, line 10). Williams discloses that the composition possesses softness, flexibility, improved strength, and tear resistance (column 8, lines 38-42). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the polyolefin composition disclosed by Williams as the “second polymer

composition" coating layers, because the composition would advantageously produce coatings with the desired softness, flexibility, improved strength, and tear resistance.

Williams is silent with regards to the hardness of the thermoplastic vulcanizate or the melt index of the polyolefin, therefore, it would have been necessary and thus obvious to look to the prior art for conventional materials. Tsai provides this conventional teaching showing that it is known in the polyolefin and/or thermoplastic vulcanizate coating art (see entire document including column 2, line 61 through column 3, line 27) to use a thermoplastic vulcanizate with a Shore A hardness grade of between 54 and 80 and/or a polyolefin elastomer with a melt index of less than or equal to 5.0 (column 2, lines 15-67 and Example 1). Therefore, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a thermoplastic vulcanizate with a Shore A hardness of between 54 and 80 and a polyolefin elastomer with a melt index of less than or equal to 5, motivated by the expectation of successfully producing the composition of Williams.

Regarding claims 9-12, Reisdorf discloses that the polyolefin woven fabric may comprise polypropylene multi-filament yarn (column 4, lines 58-62).

Regarding claims 11-12, Reisdorf does not specifically mention the claimed woven fabric denier or the claimed weave construction, but modifying the weave construction and the denier would have been obvious at the time of applicant's invention because the use of preferred materials and the optimum or workable ranges discovered by routine experimentation is ordinarily within the skill of the art. Further, it would have been obvious to modify the weave construction and/or denier because the applicant has not disclosed that having the specific weave construction or denier solves any stated problem or is for any particular purpose (see paragraph

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[32] of the specification) and/or it appears that the coating composition would perform equally well with any well known material in the art. Therefore, it would have been well within the skill of one of ordinary skill in the art at the time the invention was made to vary the fiber denier and/or the weave construction to achieve the desired fabric properties such as basis weight and breathability, and because it is within the general skill of a worker in the art to select a known weave construction on the basis of its suitability.

Regarding claims 13-16, Reisdorf does not specifically mention the claimed coating thickness, but Reisdorf does disclose that the amount of second polymer applied will depend on the end use and that higher amounts (thicker coatings) result in better abrasion resistance and weldability (column 5, lines 43-52). It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the thickness of the coating, such as from 1 to 10 mil, because it is understood by one of ordinary skill in the art that the layer thickness determines properties such as abrasion resistance and weldability and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

gzb. 6/27/05
ANDREW T. PIZALI
PATENT EXAMINER